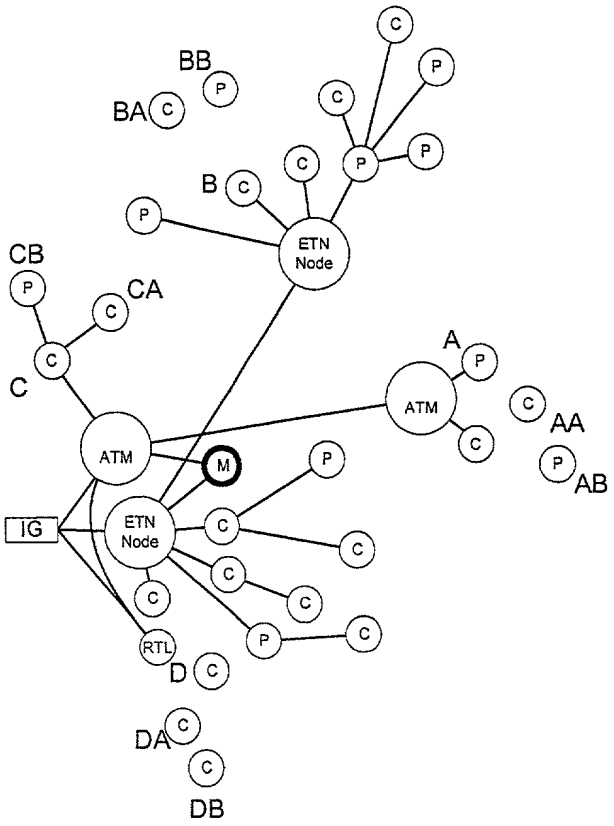

ETN Node — ETN Node

ATM — Asynchronous Transfer Mode Switch

C — CENTREX

P — PBX

RTL — ASF-RTL TN

IG — International Gateway

M — IXC POP

—— Private Trunk Group

Fig. 1

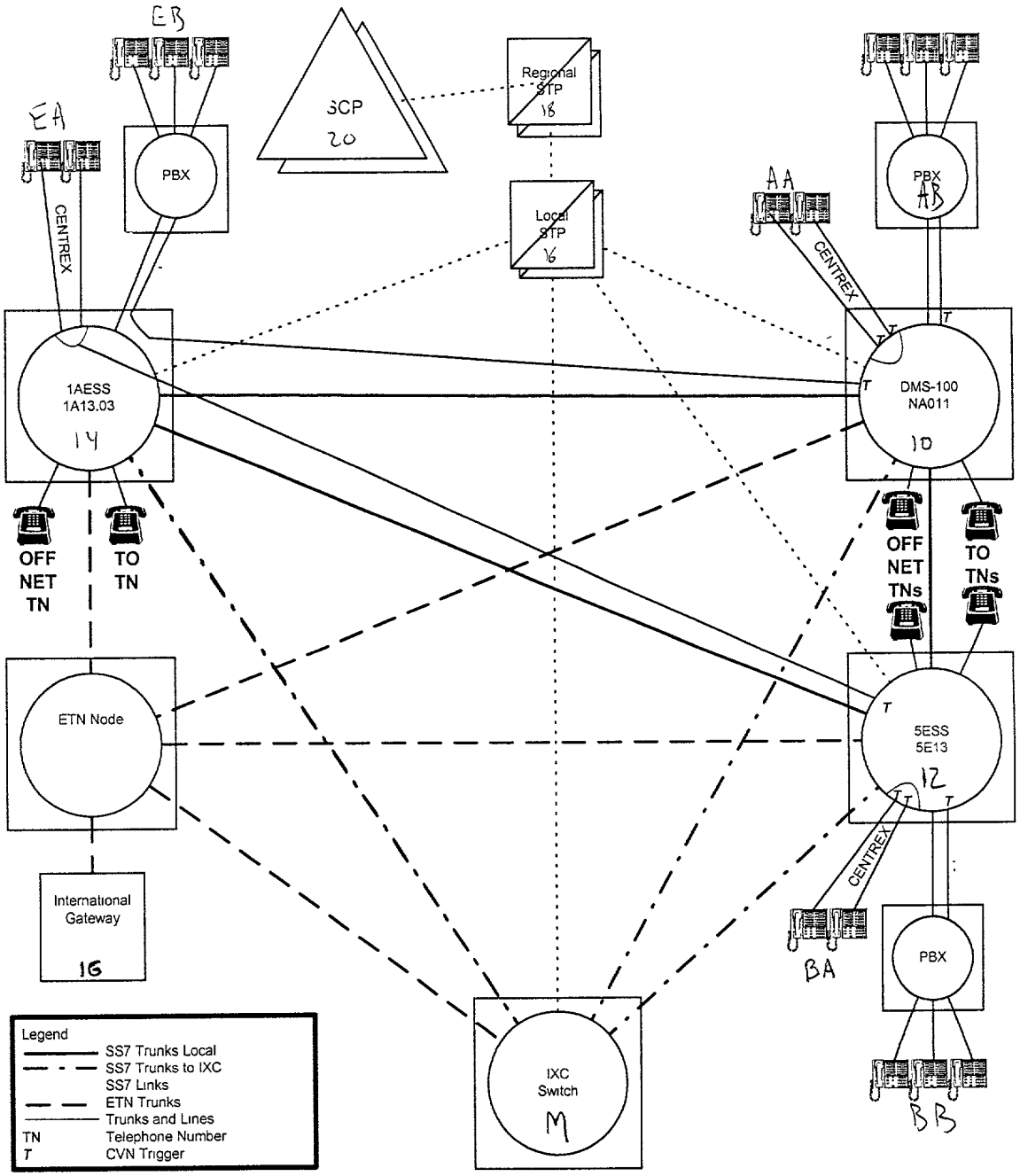
EB
EA
PBX
SCP
20
Regional STP
18
Local STP
16
AA
PBX
AB
CENTREX
CENTREX
1AESS
1A13.03
14
DMS-100
NA011
10
OFF NET TN
TO TN
OFF NET TNs
TO TNs
ETN Node
5ESS
5E13
12
CENTREX
International Gateway
16
BA
PBX
IXC Switch
M
BB
Legend
SS7 Trunks Local
SS7 Trunks to IXC
SS7 Links
ETN Trunks
Trunks and Lines
TN Telephone Number
T CVN Trigger

Fig. 1a

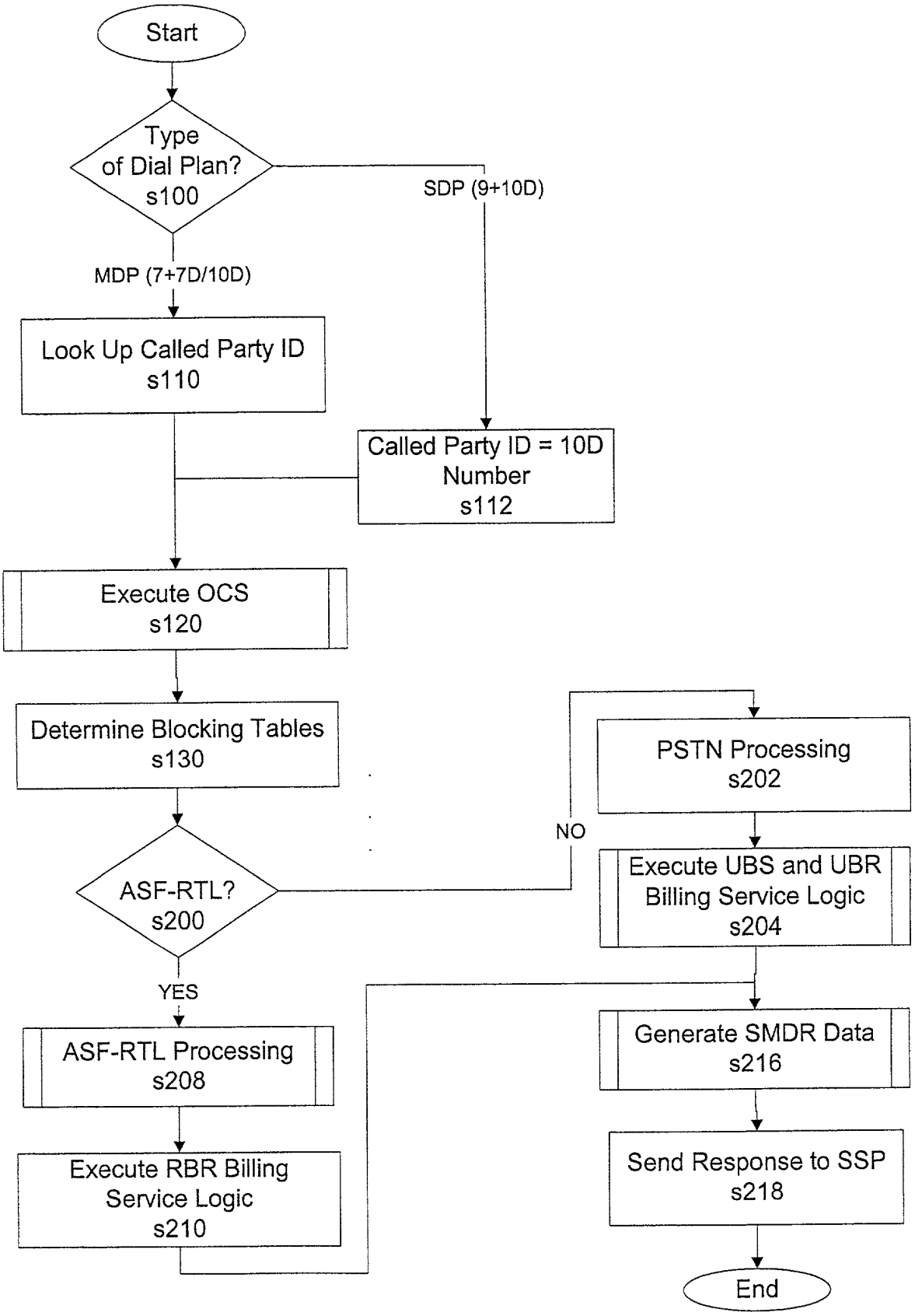
Start
Type of Dial Plan? s100
SDP (9+10D)
MDP (7+7D/10D)
Look Up Called Party ID s110
Called Party ID = 10D Number s112
Execute OCS s120
Determine Blocking Tables s130
ASF-RTL? s200
NO
YES
PSTN Processing s202
Execute UBS and UBR Billing Service Logic s204
ASF-RTL Processing s208
Execute RBR Billing Service Logic s210
Generate SMDR Data s216
Send Response to SSP s218
End

Fig. 2

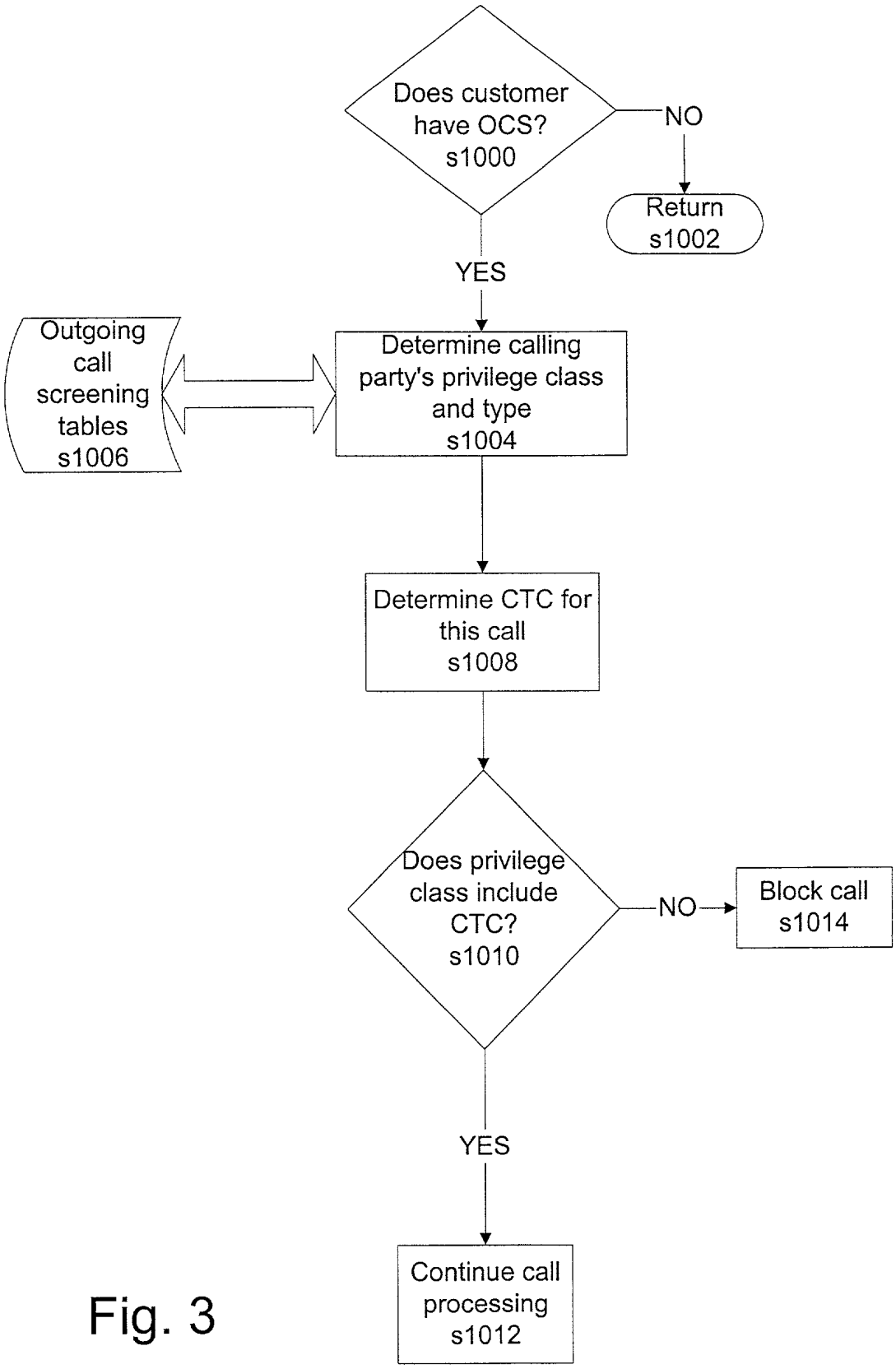
Does customer have OCS? s1000
NO
Return s1002
YES
Outgoing call screening tables s1006
Determine calling party's privilege class and type s1004
Determine CTC for this call s1008
Does privilege class include CTC? s1010
NO
Block call s1014
YES
Continue call processing s1012

Fig. 3

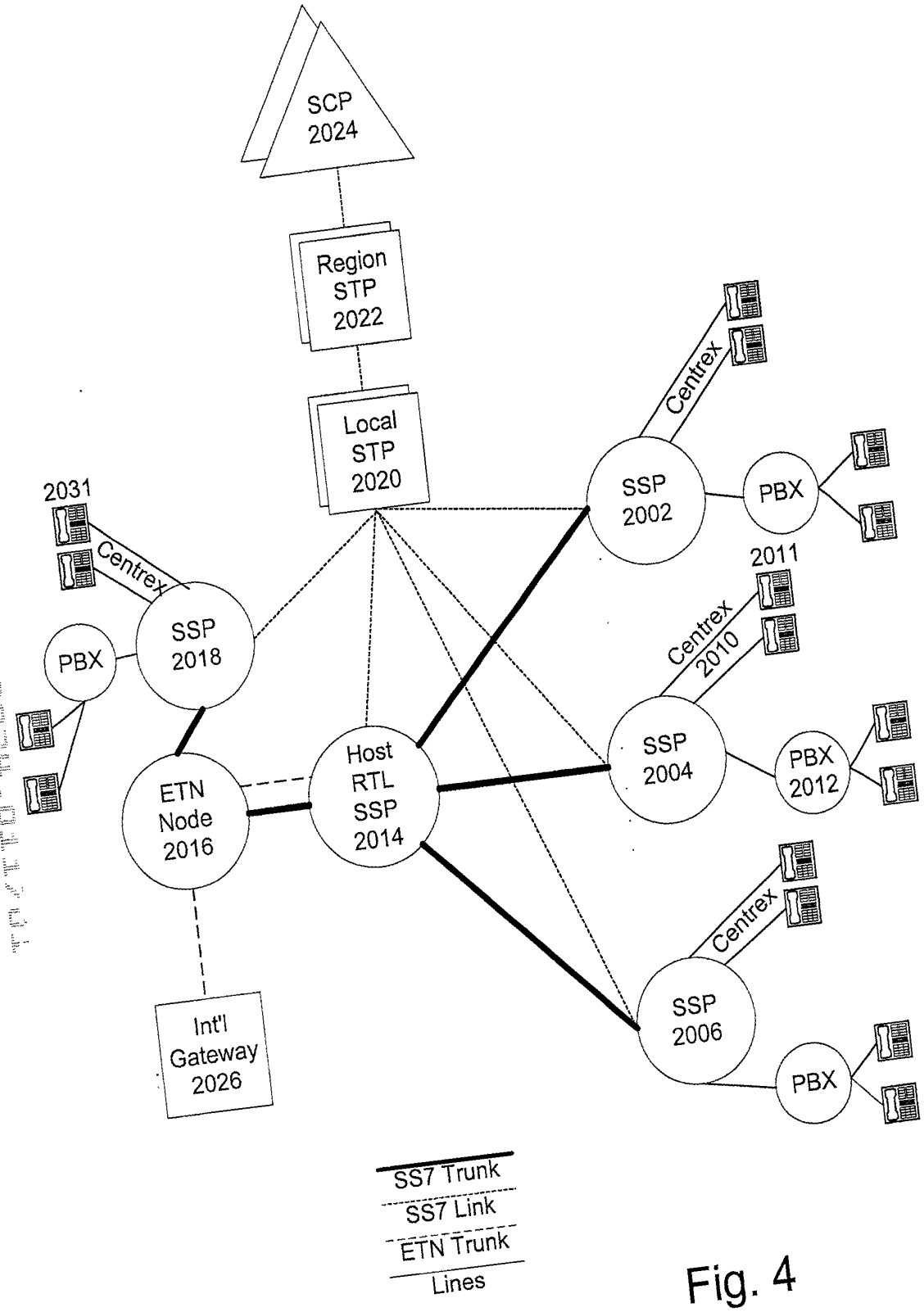
SCP
2024
Region
STP
2022
Local
STP
2020
2031
Centrex
SSP
2018
PBX
ETN
Node
2016
Int'l
Gateway
2026
Host
RTL
SSP
2014
SSP
2002
Centrex
PBX
2011
Centrex
2010
SSP
2004
PBX
2012
Centrex
SSP
2006
PBX
SS7 Trunk
SS7 Link
ETN Trunk
Lines

Fig. 4

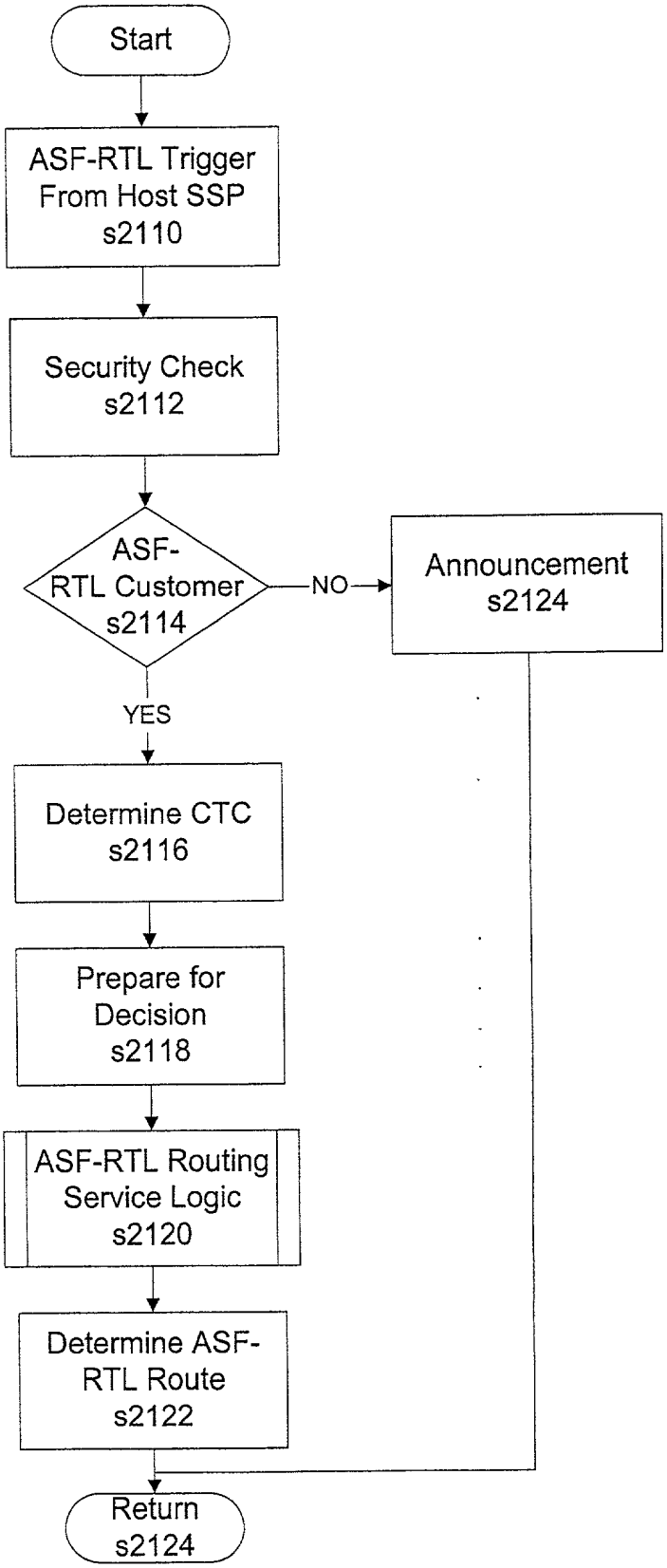
Start
ASF-RTL Trigger From Host SSP s2110
Security Check s2112
ASF-RTL Customer s2114
NO
Announcement s2124
YES
Determine CTC s2116
Prepare for Decision s2118
ASF-RTL Routing Service Logic s2120
Determine ASF-RTL Route s2122
Return s2124

Fig. 5

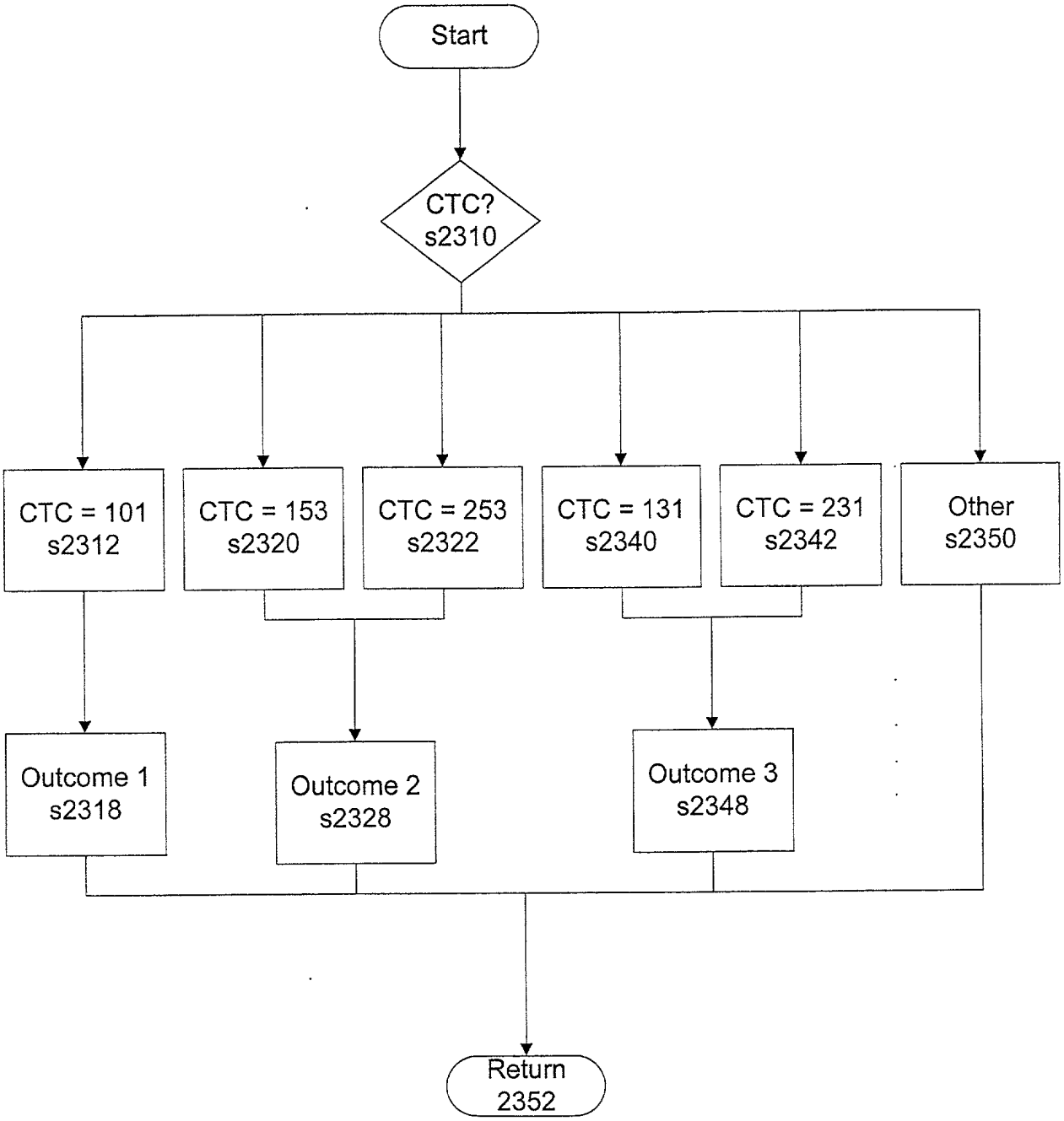
Start
CTC?
s2310
CTC = 101
s2312
CTC = 153
s2320
CTC = 253
s2322
CTC = 131
s2340
CTC = 231
s2342
Other
s2350
Outcome 1
s2318
Outcome 2
s2328
Outcome 3
s2348
Return
2352

FIG. 6

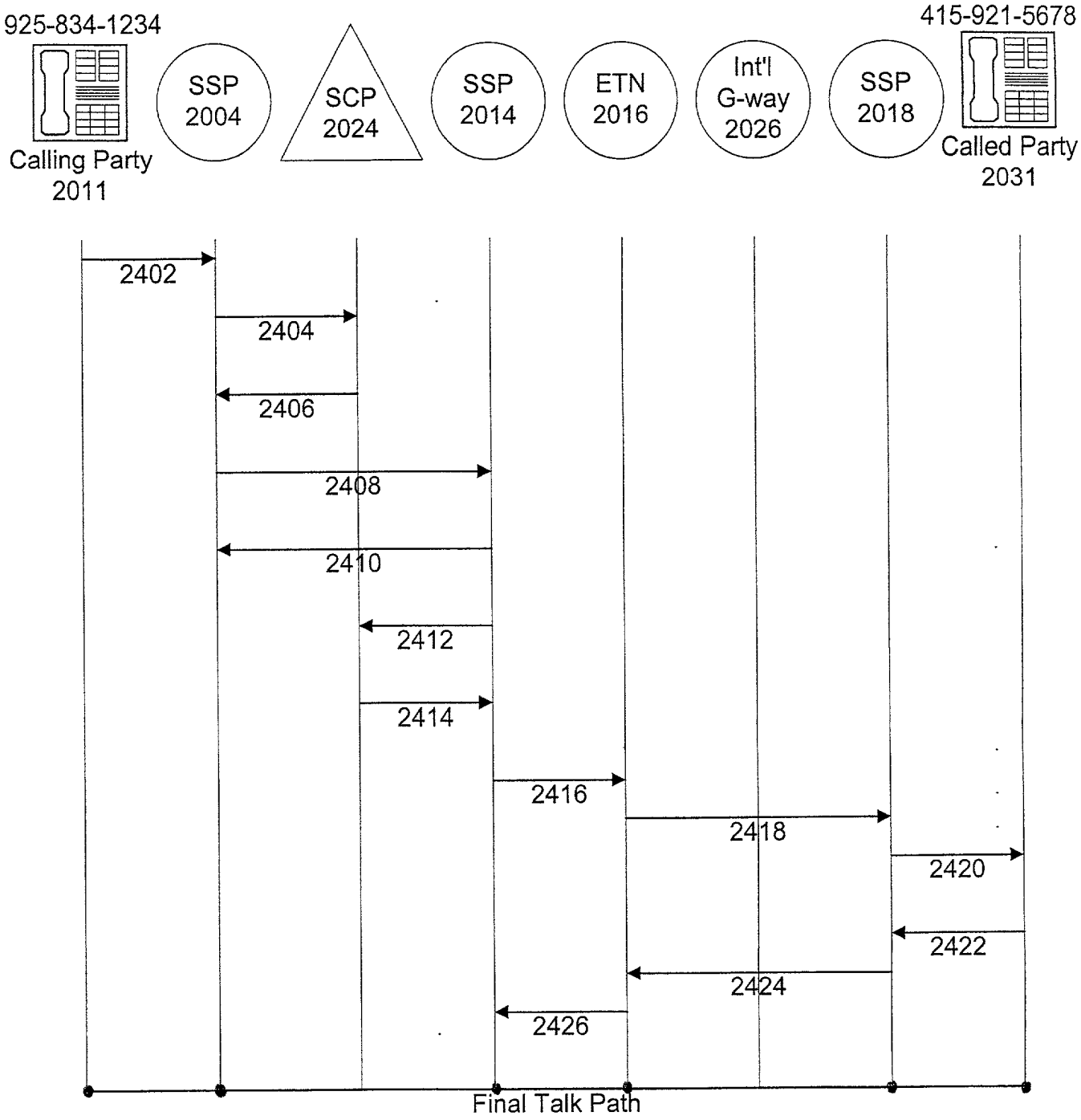
925-834-1234
Calling Party
2011
SSP
2004
SCP
2024
SSP
2014
ETN
2016
Int'l
G-way
2026
SSP
2018
415-921-5678
Called Party
2031
2402
2404
2406
2408
2410
2412
2414
2416
2418
2420
2422
2424
2426
Final Talk Path

Fig. 7

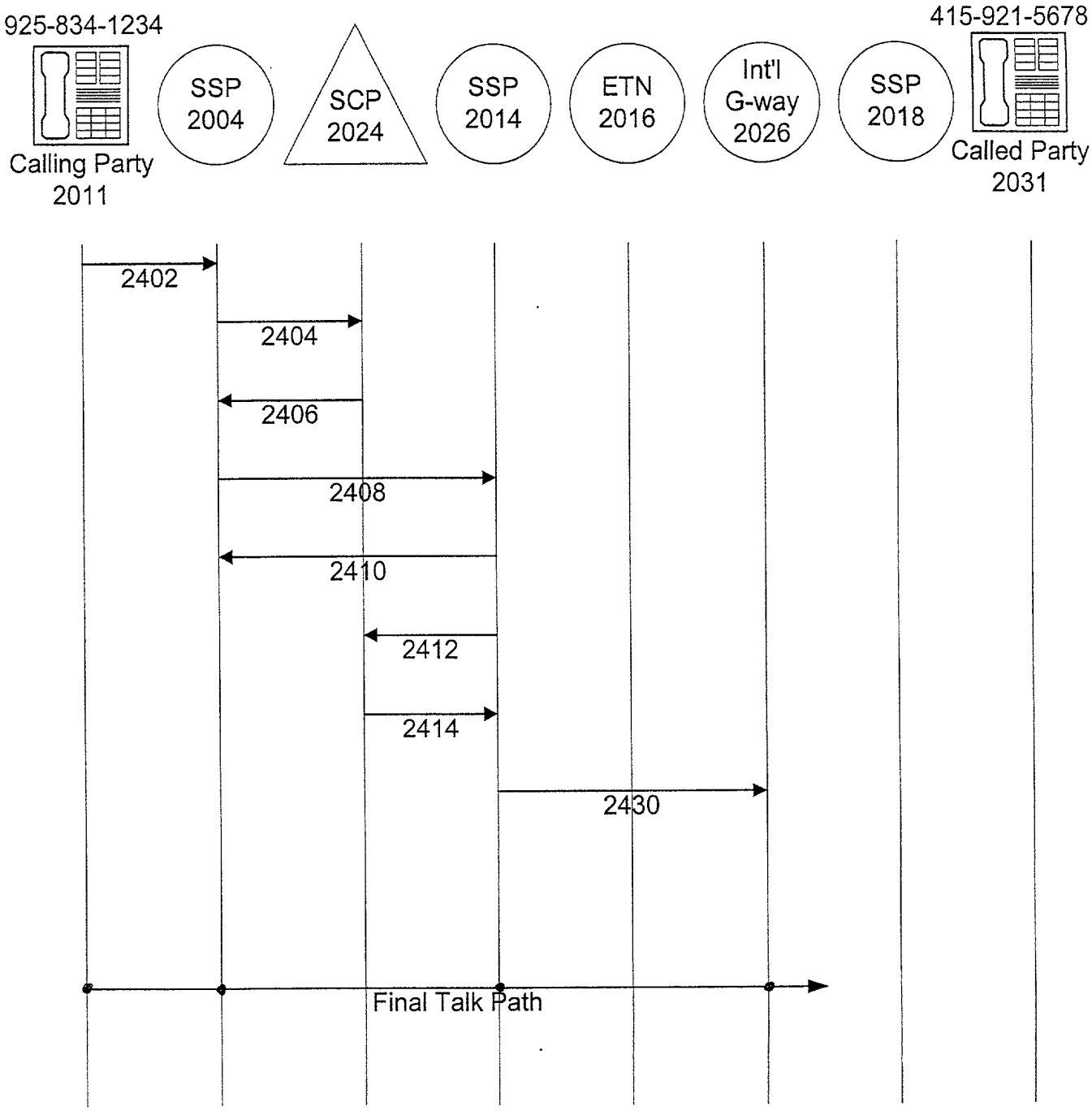
925-834-1234
Calling Party
2011
SSP
2004
SCP
2024
SSP
2014
ETN
2016
Int'l
G-way
2026
SSP
2018
415-921-5678
Called Party
2031
2402
2404
2406
2408
2410
2412
2414
2430
Final Talk Path

Fig. 8

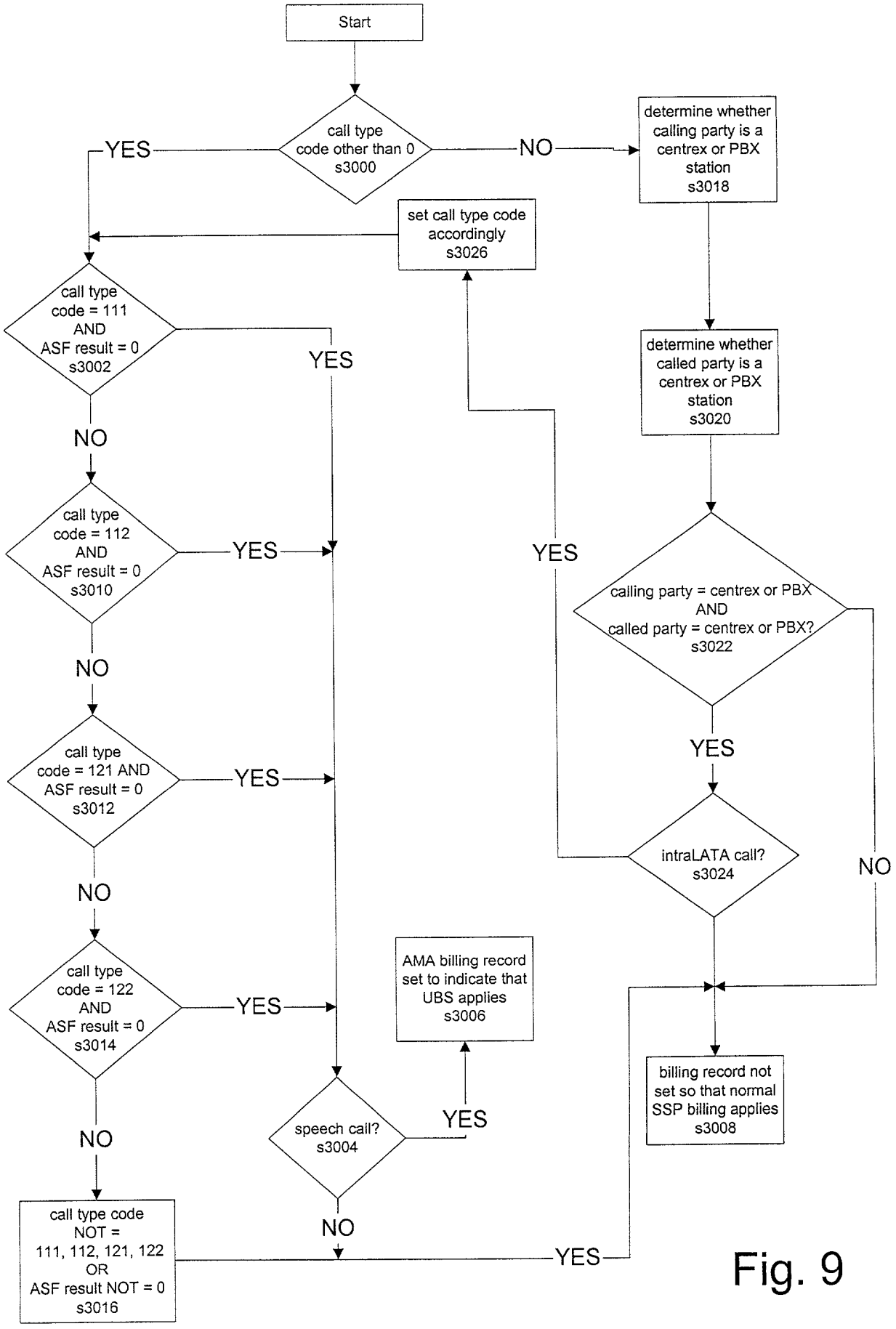
Start
call type code other than 0 s3000
YES
NO
determine whether calling party is a centrex or PBX station s3018
set call type code accordingly s3026
call type code = 111 AND ASF result = 0 s3002
YES
NO
determine whether called party is a centrex or PBX station s3020
call type code = 112 AND ASF result = 0 s3010
YES
NO
YES
calling party = centrex or PBX AND called party = centrex or PBX? s3022
YES
call type code = 121 AND ASF result = 0 s3012
YES
NO
intraLATA call? s3024
NO
call type code = 122 AND ASF result = 0 s3014
YES
NO
AMA billing record set to indicate that UBS applies s3006
billing record not set so that normal SSP billing applies s3008
speech call? s3004
YES
NO
call type code NOT = 111, 112, 121, 122 OR ASF result NOT = 0 s3016
YES

Fig. 9

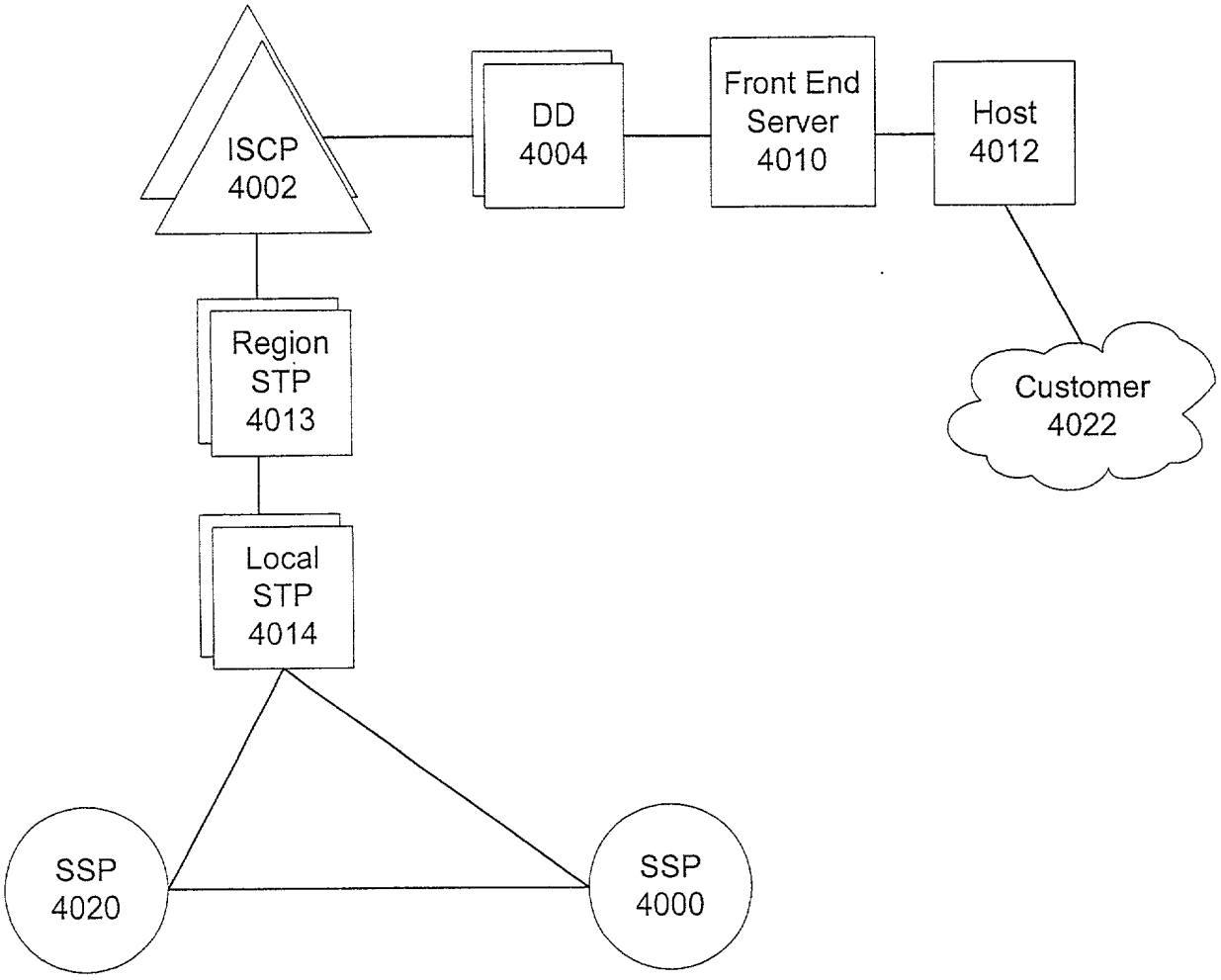
ISCP
4002
DD
4004
Front End
Server
4010
Host
4012
Region
STP
4013
Customer
4022
Local
STP
4014
SSP
4020
SSP
4000

Fig. 10a

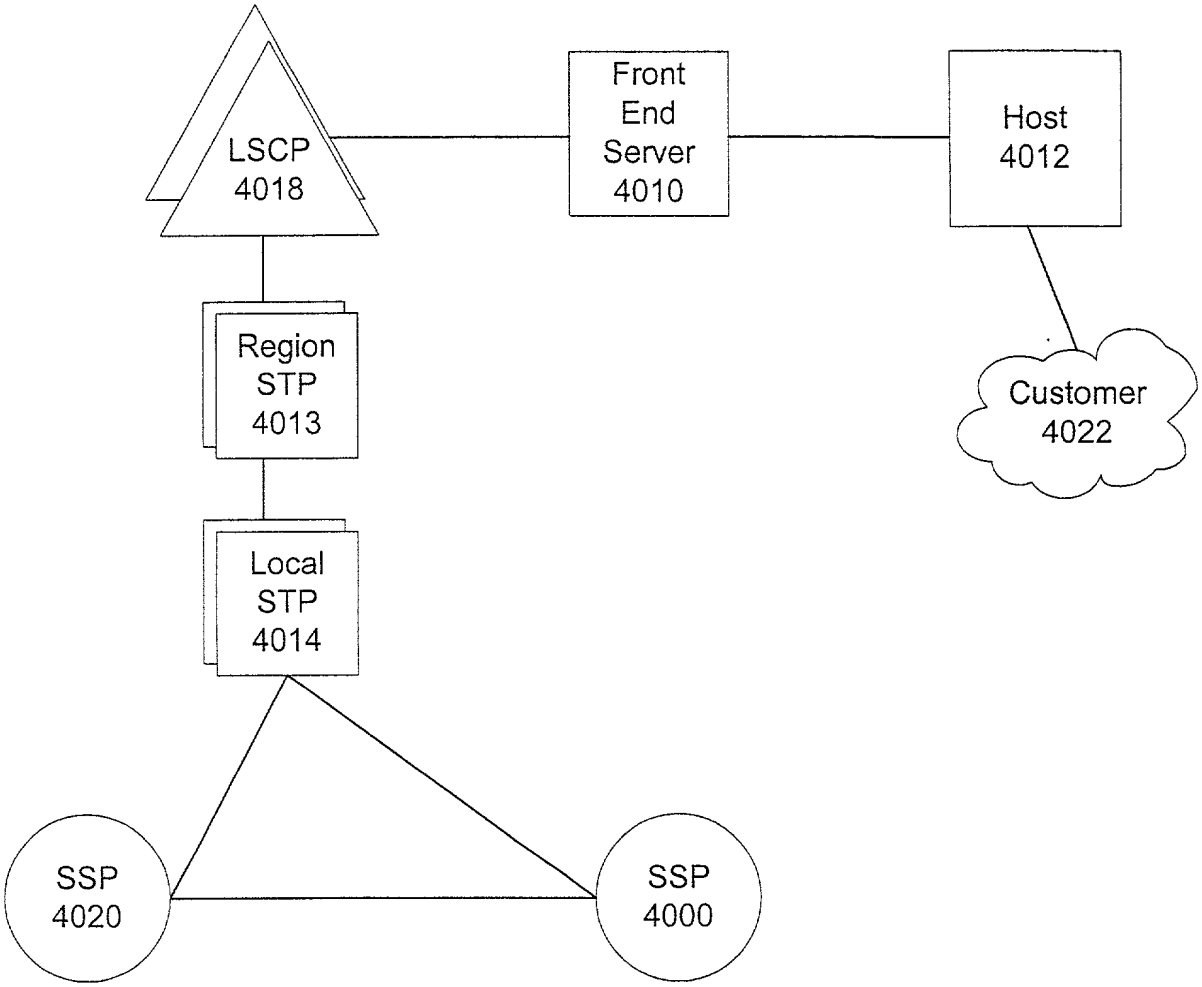
LSCP
4018
Front
End
Server
4010
Host
4012
Region
STP
4013
Customer
4022
Local
STP
4014
SSP
4020
SSP
4000

Fig. 10b

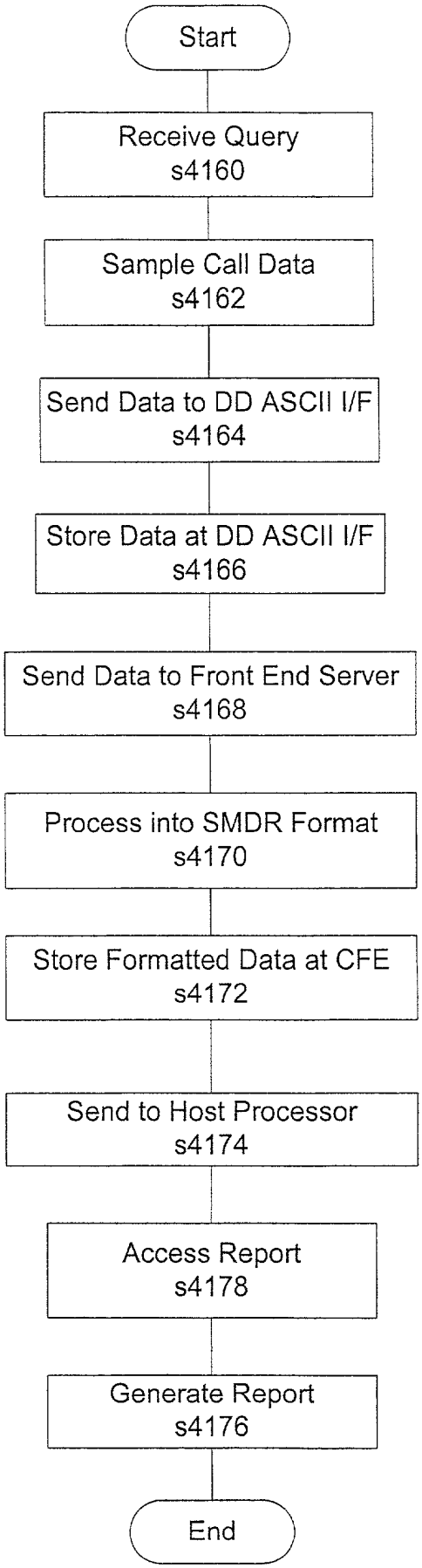
Start
Receive Query
s4160
Sample Call Data
s4162
Send Data to DD ASCII I/F
s4164
Store Data at DD ASCII I/F
s4166
Send Data to Front End Server
s4168
Process into SMDR Format
s4170
Store Formatted Data at CFE
s4172
Send to Host Processor
s4174
Access Report
s4178
Generate Report
s4176
End

Fig. 11